The state of New Mexico has a generalist special education licensure that allows anyone with a special education degree to teach any child in special education regardless of disability. Although this works well to supply the demand for special education teachers in rural areas, it may not meet the unique needs of children who are deaf or hard of hearing. This paper examines the characteristics of deaf and hard of hearing children and their teachers in rural New Mexico schools. A survey was sent to the special education directors of 50 public schools identified as enrolling deaf and hard of hearing children. Results indicate that only about 31% of the teachers serving deaf and hard of hearing children had degrees in special education, and only 6 percent had specific degrees in deaf education. About 40 percent of students served, but only 7 percent of their teachers, were Hispanic. Most children communicated via speech mode. Most students were mainstreamed, and of these, two-thirds (all deaf) used interpreters in the inclusive setting, suggesting that sign language was being used where needed. About half of children used some form of amplification. The findings suggest that deaf and hard of hearing children in New Mexico may not be receiving adequate services with regard to their deafness or to their cultural background. (SV)
ETHNIC AND CULTURE DIVERSITY IN RURAL DEAF EDUCATION PROGRAMS IN NEW MEXICO

The state of New Mexico currently certifies all teachers of deaf and hard of hearing children under a generalist special education licensure. This generalist special education certification allows the state of New Mexico to hire anyone with a Special Education degree to teach any child in special education regardless of disability. This works well in supplying the demand for teachers in rural areas. However, because the education of children who are deaf or hard of hearing is a uniquely specialized field, this generalist special education certification may not be appropriate for teachers serving the needs of children who are deaf or hard of hearing. Little information is known about the training and skill levels of teachers serving rural deaf and hard of hearing children in New Mexico.

In addition to the lack of information regarding skill levels of teachers serving deaf and hard of hearing children in New Mexico, there is little information about ethnicity of the teachers who are serving deaf and hard of hearing children in this state (Maestas, 1999). Nationally, White non-Hispanic teachers of the deaf tend to comprise about 91% of the teachers of the deaf and hard of hearing (Andrews and Jordan, 1993). It has been suggested that teachers of Anglo origins tend to use less cultural emphasis in their teaching methods (Lummer, 1999). This may be distressing as cultural emphasis has recently been established as an important aspect of curricula for instruction of deaf and hard of hearing children (Christensen & Delgado, 1993). Further, it has been established that non-English speaking children are often over-referred for other disabilities such as learning disabilities, mental retardation and emotional/behavioral disabilities (Moores, 1997).

In addition to ethnic minority, Deaf culture issues must be addressed. Children in rural areas have the same need as deaf and hard of hearing children in large public schools. In fact, they may be more isolated due to the smaller number of deaf adults in rural communities. Andrews and Jordan (1993) reported that only seven percent of teachers for the deaf and hard of hearing are deaf or hard of hearing themselves. In addition, a larger percentage of children in rural areas have hearing parents as most deaf adults prefer to live and raise their children in metropolitan areas where there is a better chance of meeting and socializing with other Deaf community members. Therefore, deaf children in rural areas may have parents who are completely unaware of the Deaf Community and other isolating factors regarding their children’s deafness.

Thus, the purpose of this investigation was twofold. First, the investigator needed to ascertain characteristics of the deaf and hard of hearing children being served in rural public schools in New Mexico. Secondly, the characteristics of the teachers serving these children needed to be investigated. The results of this investigation would provide teacher training institutions with data which would allow them to focus training in areas of weakness with in the state. The results would once disseminated would allow school districts the opportunity to help teachers with professional development. And finally, results, if indicative of shortages of skilled teachers for the deaf and hard of hearing, would suggest to the State Department of Education in New Mexico that changes are required in order to meet the needs of deaf and hard of hearing children in rural New Mexico.
METHODS

This project investigated the types of services available to children who are deaf and hard of hearing in rural New Mexico. Information obtained through the investigation also provided information regarding the needs of rural programs serving deaf and hard of hearing children.

The State Department of Education Report for the 1997-1998 school year reported 417 deaf and hard of hearing school-age children being served by 50 public schools in New Mexico. Of the 417 children, 334 were reported to be hard of hearing and 83 were reported to be deaf.

Questionnaires

Fifty public schools serving deaf and hard of hearing children were surveyed via mailed out questionnaires. Questionnaires for the survey were developed in two sets. The first set of questions related to characteristics of students and academic placement. The second set of questions related to characteristics of the teachers serving the deaf and hard of hearing children.

Student-Related Questions. Student-related questions consisted of requests for number of students served by the teacher, hearing status (deaf or hard of hearing) of those students, grade level, language of home environment, parental hearing status, use of sign language in the home, communication mode used in the classroom, placement (inclusion) information, interpreter information, use of assistive listening devices, and ethnic group.

Teacher-Related Questions. Teacher-related questions consisted of requests for information regarding college degree(s), college degree major, teaching certification, national licensure, professional associations, years experience, hearing status, and ethnic group.

Procedures

Surveys were developed and protocol were followed for use of human subjects in research. Permission for research was granted by the Institutional Review Board for the survey. Surveys were sent to the special directors of each of the 50 school districts. Special education directors were asked to distribute the questionnaires to teachers in charge of educational plans for children who were deaf or hard of hearing. Teachers were requested through a cover letter to fill out the information regarding students and themselves and to return the questionnaire in the enclosed business reply envelop.

Responses were recorded into a computer database on CRUNCH4 software (CRUNCH, 1992). Data were analyzed using descriptive statistics.

RESULTS

In order to determine what type of services rural New Mexican deaf and hard of hearing children are receiving, 50 public schools were surveyed with the following results. Forty-six percent of returned forms were from teachers who provided services to deaf children and 54% of the respondents were teachers who provided services to hard of hearing children. Half of the teachers’ sources for information on their pupil(s) hearing capabilities came from diagnostic evaluation reports while the other half came from word of mouth sources such as parents, speech language pathologists, interpreters and supervisors. Thirty-seven percent of the students served were in elementary schools 36% were served in middle schools and 37% were served in high schools.
Student Characteristics

Reports of home language of the children served indicated that 78% of the children’s home language was English, 19% was Spanish, and 2% was American Sign Language (ASL). The parental hearing status question revealed that 13% of the families had hearing loss in at least one parent. Fifty-eight percent of the parents of children who were deaf were reported to use sign language at home albeit in limited amounts for some families. Only 10% of the parents of children who were hard of hearing used any sign language at home.

Academic Placement. Information regarding the academic setting was elicited via the questionnaire Communication mode information was requested for conversation and instruction purposes. Findings indicate that speech was used in 56% of the students served, ASL was used for 18% of the students, Total Communication was used for 13% of the students, and Signed English was used for 13% of the students.

For placement information results indicate that 11% of the children were educated in self-contained classrooms for the deaf and hard of hearing. Twenty-seven percent of the children were self-contained in a Special Education classroom; 25% of those children had interpreters. Twenty-two percent of the children were partially mainstreamed; 87% of these students had interpreters. Forty percent of the students were fully mainstreamed with 66% having interpreters. Eight-two percent of the children who were deaf used amplification either in the form of hearing aids or FM units. Thirty percent of the children who were hard of hearing used some form of amplification either hearing aids or FM units.

Student ethnicity was also requested through the questionnaire. Results indicated that 38% of the students were Hispanic, 51% were Anglo, 2% were American Indian, and 8% were unreported.

Teacher Characteristics

Fifty percent of the teachers serving deaf and hard of hearing children had at least a master’s degree. Fifty percent of the teachers surveys had only bachelor’s degrees. Only six percent of the teachers serving deaf and hard of hearing children had degrees in deaf education. Thirty-one percent had degrees in Special Education. Six percent had degrees in Communication Disorders. Fifty-seven percent had degrees in other fields. Fifty percent of the teachers had Special Education teaching certificates. Fifty percent of the teachers had teaching certification in areas other than special education. No teacher reported to have specific deaf education certification from any state. Twenty-five percent reported to have national licensure in a professional teaching field such as Council for Exceptional Children or Council for the Education of the Deaf. Only twenty-five percent reported to have memberships in professional organizations. The mean number of years teaching experience was 15 with a range from 2 years to 38 years. One hundred percent of the respondents were hearing. Ninety-three percent of the teachers were Anglo and 7% were Hispanic.

DISCUSSION AND CONCLUSIONS

This project surveyed teachers of deaf and hard of hearing school children in rural New Mexico. The purpose of the study was to investigate the services provided to these children and to ascertain characteristics of the children and their teachers. Information from the study should provide the teacher training programs with information regarding the need for teachers and professional growth programs for the state of New Mexico.

The results revealed that only about 50% of the teachers serving deaf and hard of hearing children have professional training in the area of special education. Furthermore, only 6% of the
teachers had specific degrees in deaf education. New Mexico licenses teachers for the deaf under a general Special Education certificate. A generalist special education certification allows more school districts to hire from a larger pool for children being served under IDEA. Therefore, although a teacher may be deaf education trained his or her certification never indicates training in Deaf Education. The negative aspect of that is any teacher with special education certification may teach deaf and hard of hearing children in New Mexico. For that reason this survey asked for information regarding specific college degree and major. It is of great concern that the majority of teachers serving children with hearing loss are not trained in this very special area. Seventy percent of the states in the US require a separate certification, different from Special Education, for deaf educators (Chinn, 1999). Deaf education is considered by most states as a very specialized field usually requiring a master’s degree for national licensure. This investigation found that 50% of the teachers surveyed had only Bachelor’s degrees and a only one of them in Deaf Education.

In addition to training concerns, the ethnic distribution of teachers for the deaf and hard of hearing is different compared to the population they serve. In this study 7% of the teachers were Hispanic, whereas around 40% of the children served were of Hispanic ethnic origin. Multicultural focus has been mandated for deaf education curricula. According to Lummer (1999), Anglo teachers tend to place less emphasis on culture education. This suggests that the children in New Mexico may not be served as appropriately as suggested by federal law.

Finally, results of the survey portion that addressed characteristics and academic placement for the children referred to in this survey. The survey respondents were disproportionate as to the percentage of children who were deaf as compared to those who were hard of hearing. Specifically, the state of New Mexico statistics suggests a deaf/hard of hearing ratio of 20%/80%. However, survey respondents suggest a ratio of 46%/54%. It is likely that the differences herein are due to some surveys not being returned to the investigator.

The majority of children served in this study were communicated with via speech mode. This majority was nearly the same as the percentage of hard of hearing children suggesting that hard of hearing children are spoken to and speak while most deaf children are using some form of sign system. The majority of children (62%) are also mainstreamed, of these 66% (all deaf) use interpreters in the inclusion setting. This further supports that sign language is being used where needed. One should be cautioned however that many hard of hearing children can do and do well academically and socially when they communicate via a sign mode.

Only about 50% of the children reportedly used some form of amplification. Considering that the majority of these children are hard of hearing, they would probably benefit greatly from the use of amplification. Therefore, this study suggests the need to provide the teachers of these children with some sort of inservice regarding the use of and trouble shooting of hearing aids and FM units in classrooms for the deaf and hard of hearing.

In conclusion, results of this study indicate that for the most part, teachers in New Mexico are not specifically trained to work in the field of deaf education, yet many are doing just that. The concern is that Deaf Education is a specialized field which usually requires a Master’s degree to acquire enough knowledge to work in with children with hearing loss. These children have special communication needs and language delay which affect reading, writing and other academic areas. Further, ethnic differences suggest that teachers may not be familiar with the culture of the indigenous population and Hispanic culture so prevalent in the Southwest. Without a solid background in multicultural aspects of deafness, a teacher may not provide enough cultural focus in the education process for these multicultural deaf and
hard of hearing children. In short, New Mexican children who are deaf and hard of hearing may not be receiving adequate services.

Results of this study suggest that it may be appropriate for the state of New Mexico to move to a specialized certification for deaf education separate from special education. This change would ensure that children in rural New Mexico are served more appropriately.

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Signature: 
Diane Montgomery

Printed Name: 
Diane Montgomery

Position: 
Associate Professor

Organization: 
Oklahoma State University

Address: 
424 Willard Hall
Stillwater, OK 74078

Telephone No: 
(405) 744-9441

Date: 
April 8, 1999

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